

ABSTRACT

1 The datapipe routing bridge is composed of three building
2 blocks, transmitter, bridge and receiver. The bridge component
3 provides high levels of connectivity between multiple digital
4 signal processors without paying the penalties usually
5 associated with inter-processor connections. The individual
6 digital signal processors are connected with unidirectional
7 point-to-point links from a bridge terminal on one digital
8 signal processor to a bridge terminal on another digital
9 signal processor. A real-time comparison of the packet header
10 information with direction identification codes (IDs) stored
11 inside the bridge routes individual data transfer packets
12 arriving at the bridge into the local processor, repeated out
13 to the next processor or simultaneously absorbed and repeated.